

**Box Patent Application Commissioner of Patents** and Trademarks Washington, DC 20231

## **NEW APPLICATION TRANSMITTAL**



Transmitted herewith for filing is the patent application of

Inventor(s): Nimrod Megiddo

WARNING: Patent must be applied for in the name(s) of all of the actual inventor(s). 37 CFR 1 41(a) and 1.53(b).

For (title): A System for Enhancing Buyers Performance in Electronic Commerce

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I.	Type	OI.	ADD	ncai	JON

1. Type of Appl	lication
This new applica	tion is for a(n) (check one applicable item below):
X	Utility
	Design
	Plant
	following 3 items apply them complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE IOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS PPLICATION.
	Divisional
	Continuation
	Continuation-in-part (CIP)

#### 2. Benefit of Prior U.S. Application(s) (35 USC 120)

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

 The new application being transmitted claims the benefit of prior U.S. application(s) and enclosed are
ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S.
APPLICATION(S) CLAIMED.

#### 3. Papers Enclosed Which Are Required For Filing Date Under 37 CFR 1.53(b) (Regular) or 37 CFR 1.153 (Design) Application

_13_	Pages of Specification and Abstract			
10	Pages of Claims			

_10	Sheets	of drawing(s)
	<u>X</u>	Formal
		Informal

NOTE: "Identifying indicia such as the serial number, group and unit, title of the invention, attorney's docket number, inventor's name, number of sheets, etc., not to exceed 2 3/4 inches (7.0cm in width may be placed in a centered location between the side edges within three fourths inch (19.1mm) of the top edge Either this marking technique on the front of the drawing or the placement, although not preferred, of this information and the title of the invention on the back of the drawings is acceptable." Proposed 37 CFR 1.84(1). Notice of March 9, 1988 (1090 O.G. 57-62).

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4. A	dditional ]	Papers Enclosed
		Preliminary Amendment
	<u>X</u>	Information Disclosure Statement (37 CFR 1.98)
	<u>X</u>	Form PTO-1449
	<u>X</u>	Citations (4 References)
		Declaration of Biological Deposit
		Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
		Authorization of Attorney(s) to Accept and Follow Instructions from Representative
		Special Comments
		Other
5. De	claration	or Oath  Enclosed executed by (check all applicable boxes)
		X inventor(s).
		legal representative of inventor(s). 37 CFR 1.42 or 1.43
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
		this is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See Item 13 below for fee

	Not Enclosed
	Application is made by a person authorized under 37 CFR 1.41(c) on behalf of all the above named inventor(s). (The declaration or oath, along with the surcharge required by 37 CFR 1.16(e) can be filed subsequently).
NOTE: It is import	ant that all the correct inventor(s) are named for filing under 37 CFR 1.41(c) and 1.53(b).
	Showing that the filing is authorized. (Not required unless called into question. 37 CFR 1.41(d).
6. Inventorshi	p Statement
WARNING: If the time the last claime	named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the d invention was made, should be submitted.
The In	ventorship for all the claims in this application are:
	X the same
	or
	are not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made.
	is submitted
	will be submitted
7. Language	
X	English
	non-English
	The attached translation is a verified translation. 37 CFR 1.52(d).
8. Assignment	
<u>X</u>	An assignment of the invention to <u>INTERNATIONAL BUSINESS MACHINES CORPORATION</u>
<u>X</u>	is attached. A separate
	<ul> <li>_X "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or FORM PTO 1595 is also attached.</li> </ul>
	will follow.

NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).

## 9. Certified Copy (35 USC 119)

Certified copy(ies) of application(s):

(country)	(appln. no.)	(fited)
(country)	(арріл. до)	(filed)

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rom	which	priority	18	claim	ed

- \_\_\_\_ is/are attached.
- \_\_\_ will follow.

## 10. Fee Calculation (37 CFR 1.16)

## A. <u>X</u> Regular application

Lister from the second of the			CLAIM	S AS FIL	ED	
Number filed			Num. Extra		Rate	Basic Fee \$690.00
Total Claims	28	-20=	8	X	\$18.00	\$144.00
Independent Claims	4	-3=	1	X	\$78.00	\$78.00
Multiple dependent claim(s), if any				X	\$260.00	\$0.00

 Amendment canceling extra claims enclosed.
 Amendment deleting multiple dependencies enclosed.
 Fee for extra claims is not being paid at this time.

NOTE: If the fees for extra claims are not paid on filing, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).

	Filing Fee Calculation	\$ <u>912.00</u>
В.	 Design application (\$310.0037 CFR 1.16(f))	
	Filing Fee Calculation	\$

C.	<b></b>		application 0037 CFR 1.16(g)) Filing Fee Calculation	\$
11. S	Small Enti	ty Stater	nent(s)	
		Verifie	ed Statement(s) that this is a filing by a small entity unde	er 37 CFR 1.9 and 1.27 is/are attached.
			Filing Fee Calculation (50% of A, B or C above)	\$
12. R	Request for	r Intern:	ational-Type Search (complete, if applicable)	
		Please examir	prepare an international-type search report for this nation on the merits takes place.	application at the time when national
13. F	ee Payme	nt Being	Made At This Time	
	<del></del>	Not En	aclosed	
No filing fee is to be paid at this to can be paid subsequently.)			No filing fee is to be paid at this time. (This and the can be paid subsequently.)	surcharge required by 37 CFR 1.16(e)
	<u>X</u>	Enclos	ed	
		<u>X</u>	basic filing fee	\$ <u>912.00</u>
		<u>X</u>	recording assignment (\$40.00; 37 CFR 1.21(h))	\$_40.00
			petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00; 37 CFR 1.47 and 1.17(h))	\$
			for processing an application with a specification in a non-English language. (\$130.00; 37 CFR 1.52(d) and 1.17(k))	\$
			processing and retention fee (\$130.00; 37 CFR 1.53(d) and 1.21(l))	\$
			fee for international-type search report (\$40.00; 37 CFR 1.21(e))	\$

Total fees enclosed

## 14. Method of Payment of Fees

\$<u>952.00</u>

<u>X</u>	Check in the amount of \$ 952.00			
	Charge Account No. 12-0010 in the amount of \$ A duplicate of this transmittal is attached.			
NOTE: Fees should	I be itemized in such a manner that it is clear for which purpose the fees are paid.			
15. Authorizat	ion to Charge Additional Fees			
WARNING: If no f	ees are to be paid on filing, the following items should not be completed.			
WARNING: Accur	ately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.			
<u>X</u>	The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. <u>12-0010</u> :			
	37 CFR 1.16(a), (f) or (g) (filing fees)			
	37 CFR 1.16(b), (c) or (d) (presentation of extra claims)			
	X Any deficiencies in the fees provided.			
NOTE. Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency, it might be best not to authorize the PTO to charge additional fees, except possibly when dealing with amendments after final action.				
	37 CFR 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later			
	than the filing date of the application.)			
	37 CFR 1.17 (application processing fees)			
	37 CFR 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 CFR			
	1.311(b)).			
16. Instruction	As To Overpayment			
<u>X</u>	credit Account No. 12-0010			
M	refund			

Reg. No. 34,368 Tel. No. (703) 415-1015 SIGNATURE OF APPLICANT'S REPRESENTATIVE
Randy W. Lacasse

Lacasse & Associates 2001 Jefferson Davis Hwy, Suite 806 Arlington, VA 22202

#### X Incorporation by reference of added pages

Check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

	CLATVIED.	
	Plus added pages for new application transmittal where benef	it of prior U.S. application(s) claimed.
<u>X</u>	Plus added pages for papers referred to in Item 4 above  Number of pages added	2 pages plus 4 references
X	Plus "Assignment Cover Letter Accompanying New Applicat  Number of pages added	ion"  2 pages
	Statement Where No Further Pages Added	

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE APPLICATION FOR LETTERS PATENT

## **INVENTOR:**

Nimrod Megiddo

## TITLE:

A System for Enhancing Buyers Performance in Electronic Commerce

#### **BACKGROUND OF THE INVENTION**

### Field of Invention

The present invention relates generally to the field of electronic commerce. More specifically, the present invention is related to a system and a method for enhancing buyer's performance in electronic commerce.

## Discussion of Prior Art

Commerce includes goods, services, financial instruments such as mortgages, securities, tickets, travel fares and accommodation, and more. Figure 1 illustrates various methods of setting transaction prices 100 in electronic commerce, some of which are detailed below:

- a) Posted prices 102: Seller posts all prices of item(s) or service(s) the seller provides, and it is up to the buyer to decide whether they like to pay such prices.
- Quoted prices 104: Based on some information the seller has about the buyer, the seller quotes a personalized price to the buyer. Every seller that requires registration before releasing prices can "quote" rather than "post" a price.
- c) Bid prices 106: Buyer commits to the seller to pay a price the buyer chooses.
- d) Auctions and reverse auctions 108: Buyers compete on items for sale or sellers

compete for supplying wanted items.

Naturally, sellers are better positioned to take advantage of the new opportunities offered by electronic commerce. Sellers maintain databases for tracking their sales so they can easily collect and process information about buyers and create buyer profiles. This allows the sellers to quote different prices to different customers and increase their profits. Without appropriate tools, buyers cannot do an extensive search for comparing prices, so they end up paying more than the minimum available price. For example, the process of finding the least expensive airfare is sophisticated enough to convince the buyers that they are getting the lowest fares available. The present invention overcomes these shortcomings and enhances buyers performance in such electronic commerce situations.

The following references describe prior art in the field of improving network commerce in general. All the prior art describing commercial transactions in a network (some of which are described below) are very similar to figure 1, but none relate to the present invention's method and system for enhancing buyers performance in electronic commerce.

U.S. Patent No. 5,255,184 provides for an airline seat inventory control method and apparatus for computerized airline reservation systems. Described is an optimal reservation control using network-wide booking limits which takes into account the probabilistic nature of the demand.

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U.S. Patent No. 5,848,139 discloses a telecommunication traffic pricing control system wherein a price controller implements a pricing strategy that is dependent on past changes in telecommunications traffic volume on the trunk group and past changes in price of delay tolerant calls, and preferably implements a set of fuzzy logic rules.

U.S. Patent No. 5,974,308 teaches a cellular phone system that optimizes user demand by

charging system subscribers according to a variable charge rate that is based on the price elasticity

of subscribers. Service providers continuously determine a charge rate that can be tailored to a

specific subscriber category according to a number of variables which optimizes the individual cell

capacity and the overall system capacity.

World Patent No. WO 98/53415 provides a method for incorporating psychological effects such as price thresholds and promotional activity into a demand model. First, the original demand model is modified to include a mechanism to convert actual prices into perceived prices, thus causing the demand model to predict higher demand for certain prices. Then, the user modifies the function to convert from real prices to perceived prices. This modified demand function is then fitted to a sales history to yield the parameters appropriate to its particular form.

There also exist website services that search the web on behalf of the user to find sites offering the best deals on products a buyer is interested in purchasing. However, these website services fall short of bargaining on behalf of the prospective buyer.

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In all the above described systems there is no mention of enhancing buyers performance in an electronic commerce scenario. Present commercial transactions are limited by sellers being better positioned to take advantage of new opportunities offered by electronic commerce. Whatever the precise merits, features and advantages of the above cited references, none of them achieve or fulfill the purposes of the present invention. The current invention puts the buyer's interests ahead of the sellers and provides for an enhanced buyer performance system in an electronic commerce situation. These and other objects are achieved by the detailed description that follows.

#### **SUMMARY OF THE INVENTION**

The system enhances buyers performance by gathering information, presenting to sellers sophisticated buyers who do not pay more than the minimum and indicating to sellers when they are competitive, influencing them to lower prices.

In one embodiment, the system operates through a web site and creates a major web portal where a consumer may obtain advice about prices of just about anything and will be able to initiate transactions using various services provided by the system. Although the system is meant to help the end consumer, it may also be used by businesses when they need to buy from other businesses. In another embodiment, the system uses fictitious user names and works with different sellers to generate and store specific quotes. This information is later used to purchase goods on behalf of buyers who do not want to reveal their identities. As a further embodiment, the system can also uncover hidden fee structures associated with sellers and businesses.

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#### BRIEF DESCRIPTION OF THE DRAWINGS

- Figure 1 illustrates different means of transacting commercially on the Internet.
- Figure 2 illustrates the general architecture of the system.
- Figure 3 illustrates a method of surveying wholesale prices.
- Figure 4 illustrates a method of surveying posted prices.
- Figure 5 illustrates a method of surveying quoted prices.
- Figure 6 illustrates a method of obtaining specific quotes.
- Figure 7 illustrates a method of protecting buyers anonymity.
- Figure 8 illustrates a method for promoting competition among sellers.
- Figure 9 illustrates a method for uncovering price structures.
- Figure 10 illustrates a system for enhancing buyers performance in electronic commerce.

#### **DESCRIPTION OF THE PREFERRED EMBODIMENTS**

While this invention is illustrated and described in a preferred embodiment, the invention may be produced in many different configurations, forms and materials. There is depicted in the drawings, and will herein be described in detail, a preferred embodiment of the invention, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and the associated functional specifications of the materials for its construction and is not intended to limit the invention to the embodiment illustrated. Those skilled in the art will envision many other possible variations within the scope of the present invention.

Figure 2 illustrates the fundamental architecture of the present system 200 which helps

enhance buyers performance by gathering information 202, presenting to sellers 204 sophisticated buyers who do not pay more than the minimum and indicating to sellers 206 when they are competitive, influencing them to lower prices.

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In one embodiment, the system operates through a web site and offers buyers several facilities where a consumer may obtain advice about prices of just about anything and will be able to initiate transactions using various services provided by the system. Although the system is meant to help the end consumer, it may also be used by businesses when they need to buy from other businesses. Sometimes big companies like IBM pay higher prices for items that they can buy for less if they used a different identity. Discussed below are some of the methods associated with the current invention.

Figure 3 illustrates the method 300 of the current invention that surveys wholesale prices. As a first step, the system collects information 302 regarding wholesale prices associated with different items. Next, the system generates reference points 304 for each of said items. Lastly, the system utilizes said reference points to assess 306 whether or not posted or quoted prices are reasonable.

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Another facility offered by the system, as illustrated by Figure 4, is a method to survey posted prices. Commercial sites on the world-wide-web are continuously scanned 402 by the system to extract posted prices. Next, the system stores said extracted prices in a database 406 so that it can point 408 the buyer to vendors that post the best prices for an item in which the buyer is interested.

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Figure 5 illustrates the present invention's method of surveying quoted prices 500. The system continuously asks for price quotes 502 on non-quoted items at commercial sites. In order to obtain such quotes, the system generates fictitious user names 504 and works through different Internet service providers (ISP's) and requests price quotes 506 using said fictitious names so that the sellers believe they are quoting prices to real customers. Furthermore, the system creates such identities and builds for them reputations 508 as sophisticated buyers who know the market and are not willing to pay more than the minimum available price. The system is then able to generate statistical distributions 510 of quotes so that a buyer can compare 512 a quote he receives to what has been observed by the system.

Another part of the invention is a method for obtaining specific quotes 600, as illustrated in Figure 6. First, the system conceals the buyer's true identity 602 and as a next step the system picks one of many available fictitious names 604 and uses the fictitious name to request a price quote 606 on behalf of the buyer. Said fictitious user names are picked from a list of names that have already built a reputation as a smart buyer (as explained above). Then, the system stores all the quotes 608 it has received and maintains statistics 610 about them for reference by future buyers.

As an extension to the embodiment described above, the method for purchasing on behalf of buyers and protecting buyer's anonymity is carried a step further, as described in Figure 7. The method 700 provides the buyer with the option of purchasing items 702 for him so that the buyer

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does not have to disclose to the seller any information about himself. A purchase is made by the system using one of many fictitious names 704 that have built a reputation as a smart buyer. Included in the method 700 is an option to receive the item 706 at a site owned by the system operator, and shipping it from that site 708 to the true buyer.

Figure 8 illustrates the present invention's method 800 for promoting competition among

sellers. Generated in the system are e-mail messages, regular mail and faxes 802 informing sellers

of lower prices quoted by their competitors and advising them 804 when they should consider

lowering their prices. In addition, the system also maintains, on its website, for public viewing

ratings of sellers as sellers who overcharge versus sellers who offer attractive prices 806.

Another part of the current invention is a method 900 to uncovering price structures as illustrated in Figure 9. This service applies specifically to the airfare market. Airlines do not publish their fare structure. For example, they do not make it clear how the fare depends on the time of the day, the day of the week and the date. The buyer tells the desired time of travel and the airline returns a fare. Airline fares are repeatedly probed 902 by the present system for uncovering such structures 904. It then suggests to the buyers 906 how money can be saved by changing the requested time of the day, day of the week, etc.

In addition to the above described methods, the system maintains a pair of databases. First of said databases stores a list of alternate products, services, and competing sellers. With aid of said

database, the system offers the buyer alternatives that save them money, either by buying from a different vendor or by buying an alternative product. Second of said databases collects and maintains customers feedback. The system collects feedback from customers about the quality of products and service by sellers and makes the information available to future clients.

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All the above methods can be implemented in a system as shown in Figure 10 wherein said system 1000 comprises a first surveyor 1002 for surveying posted prices, a second surveyor 1004 for surveying posted quotes, and a third surveyor 1006 for surveying quoted prices. Also included is a quote-requester 1008 for obtaining specific quotes and an anonymity-protector 1010 for protecting buyers anonymity. The system further consists of a promoter 1012 for promoting competition among sellers and a price-structure-revealer 1014 for uncovering underlying fee structures. Also maintained is a first database 1016 for storing alternate products, services, and competing sellers, and a second database 1018 for collecting feedback from customers. The system thus enhances buyers performance by gathering information, presenting to sellers sophisticated buyers who do not pay more than the minimum and indicating to sellers when they are competitive, influencing them to lower prices.

The above enhancements and its described functional elements are implemented in various computing environments. For example, the present invention may be implemented on a conventional IBM PC or equivalent, multi-nodal system (e.g. LAN) or networking system (e.g. Internet, WWW or wireless web). The system and method may be performed locally, across networks or a combination thereof in a distributed environment. Communication mediums include, but are not limited to, conventional telephony mediums as well as wireless, RF, satellite, infrared, microwave, etc. All programming and data related thereto are stored in computer memory, static or dynamic, and may be retrieved by the user in conventional computer storage, display (i.e. CRT) and/or hardcopy (i.e. printed) formats. The programming of the present invention may be implemented by one of skill in the art of electronic commerce.

#### **CONCLUSION**

A system and method has been shown in the above embodiments for the effective implementation of a system for enhancing buyers performance in electronic commerce. While various preferred embodiments have been shown and described, it will be understood that there is no intent to limit the invention by such disclosure, but rather, it is intended to cover all modifications and alternate constructions falling within the spirit and scope of the invention, as defined in the appended claims. For example, the present invention should not be limited by software/program, computing environment, specific computing hardware. In addition, the specific methods for transacting via electronic commerce are representative of the preferred embodiment and should not limit the scope of the invention.

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#### **CLAIMS**

discrimination.

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A system for enhancing price discovery in electronic commerce, wherein said system comprises: one or more automated surveyors for surveying any of: posted prices, bid prices, posted quotes, quoted prices, and auctions; an anonymous buyer profile, said anonymous buyer profile representing a sophisticated buyer and included within at least one of said one or more automated surveyors, and wherein use of said anonymous buyer profile increases the probability of discovering the best

A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said 2. anonymous buyer profile is used multiple times to develop a historical usage therefor.

prices in an electronic commerce environment which includes electronic price

3. A system for enhancing price discovery in electronic commerce, as per claim 2, wherein said developed anonymous buyer profile is used to make actual purchases for a buyer using said system.

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- 4. A system for enhancing price discovery in electronic commerce, as per claim 3, wherein when said system makes actual purchases for a buyer it further includes: receiving purchased at least one item at a site owned by system operator or a third party, and shipping at least item to said buyer.
- 5. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said surveying posted prices further comprises:

  collecting information about wholesale prices;

  generating reference points, and
  assessing from said reference points whether a posted price is reasonable.
  - 6. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said surveying posted quotes further comprises:

    scanning continuously commercial sites on a network;

    extracting posted quotes from said sites;

    maintaining a database of posted quotes, and

    pointing a buyer to vendors that post a best price based on said posted quotes for an item the buyer is interested in.

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- 7. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said included within at least one of said one or more automated surveyors comprises:
- choosing one of a plurality of available fictitious names;
- requesting price quotes on behalf of said chosen fictitious names;
- 5 storing all received quotes, and
- 6 maintaining statistics about said stored received quotes for reference to future buyers using said system.
  - 8. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said system further comprises:

promoting competition among sellers by:

generating messages to inform sellers of lower prices quoted by their competitors; advising said sellers to consider lowering prices, and maintaining a website, for public viewing, regarding ratings of sellers.

9. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein potential buyers receive messages of prices discovered by any of: e-mail, regular mail, or faxes.

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- 1 10. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said method of uncovering price structures further comprises:
  - probing a commercial site with varying parameters associated with the price of at least one product;
    - uncovering the underlying fee structure and how it varies with respect to different parameters, and
    - 11. A system for enhancing price discovery in electronic commerce, as per claim 1, wherein said

network includes any of the: Internet, WWW, wireless web, LAN or WAN.

suggesting to a potential buyer what parameters can be changed to save money.

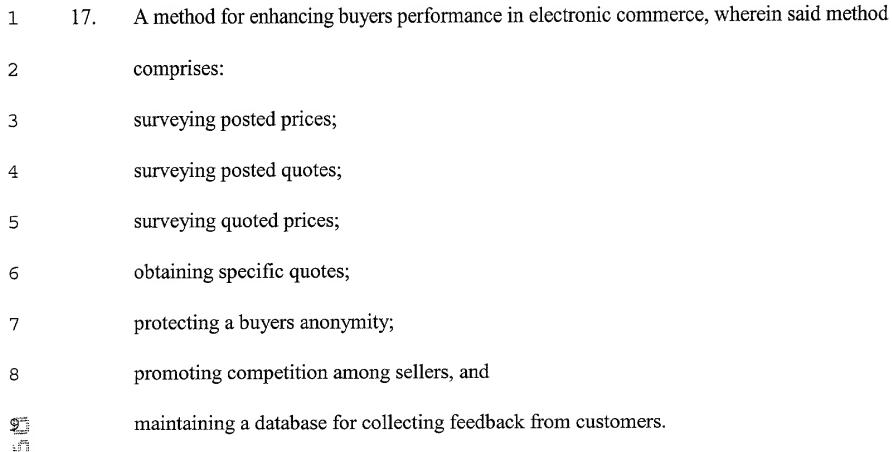
12. A method for enhancing buyers performance in electronic commerce, wherein said method comprises:

electronically presenting information to sellers located across a network about sophisticated buyers who are not willing to pay more than a minimum price;

- using said sophisticated buyers to electronically gather information about prices on a network, and
- indicating to sellers when they are competitive, and influencing them to lower prices.

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- 1 13. A method for enhancing buyers performance in electronic commerce, as per claim 12,
  2 wherein said influencing them to lower prices comprises any of:
  3 generating messages to inform sellers of lower prices quoted by their competitors;
  4 advising said sellers to consider lowering prices, and
  5 maintaining a website, for public viewing, regarding ratings of sellers.
  - 14. A method for enhancing buyers performance in electronic commerce, as per claim 12, wherein said sophisticated buyers are used to anonymously make actual purchases for a buyer using said method.
  - 15. A method for enhancing buyers performance in electronic commerce, as per claim 14, wherein when said method anonymously makes actual purchases for a buyer it further includes: receiving purchased item(s) at a site owned by system operator or a third party, and shipping item(s) to said buyer.
  - 16. A method for enhancing buyers performance in electronic commerce, according to claim 12, wherein said network includes one of the: Internet, WWW, wireless web, LAN or WAN.



18. A method for enhancing buyers performance in electronic commerce, according to claim 17, wherein said method of surveying posted prices further comprises the steps of: collecting information about wholesale prices; generating reference points, and assessing from said reference points whether a posted price is reasonable.

- 1 19. A method for enhancing buyers performance in electronic commerce, according to claim 17,
- wherein said method of surveying posted quotes further comprises the steps of:
- scanning continuously commercial sites on a network;
- extracting posted quotes from said sites;
- 5 maintaining a database of posted quotes, and
- pointing a buyer to vendors that post a best price based on said posted quotes for an item the
- buyer is interested in.
  - 20. A method for enhancing buyers performance in electronic commerce, according to claim 17, wherein said network comprises one of the: Internet, WWW, wireless web, LAN, or WAN.
  - A method for enhancing buyers performance in electronic commerce, according to claim 17, wherein said method of surveying quoted prices further comprises of the steps of: scanning continuously commercial sites on a network;

generating fictitious user names;

- requesting price quotes using said fictitious names;
- building reputation of said fictitious name as sophisticated buyers;
- generating statistical distribution of quotes, and
- comparing a quote a buyer receives to what has been observed in the system.

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- A method for enhancing buyers performance in electronic commerce, according to claim 17,
  wherein said method of obtaining specific quotes further comprises the steps of:

  concealing a buyers true identity;

  picking one of many available fictitious names;

  requesting price quotes on behalf of the buyer without revealing the buyer's true identity;

  storing all received quotes, and
  - A method for enhancing buyers performance in electronic commerce, according to claim 17, wherein said method of protecting a buyers anonymity further comprises the steps of: providing buyer the option of purchasing item(s) for him; purchasing the item(s) using one of many available fictitious names; receiving item(s) at a site owned by system operator, and shipping item(s) to buyer.

maintaining statistics about said stored received quotes for reference of future buyers.

A method for enhancing buyers performance in electronic commerce, according to claim 17, wherein said method of promoting competition among sellers further comprises the steps of: generating messages to inform sellers of lower prices quoted by their competitors; advising said sellers to consider lowering prices, and maintaining a website, for public viewing, regarding ratings of sellers.

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- 25. A method for enhancing buyers performance in electronic commerce, according to claim 24, wherein said messages generated include one of the following: e-mail, regular mail, or faxes.
  - A method for enhancing buyers performance in electronic commerce, according to claim 17, further comprising a method of uncovering price structures by:

    probing a commercial site with varying parameters associated with the price of at least one product;

    uncovering the underlying fee structure and how it varies with respect to different parameters, and

suggesting to the buyer what parameters can be changed to save money.

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- An article of manufacture comprising a computer user medium having computer readable program code embodied therein which enhances buyers performance in electronic commerce, said system comprising:
  - computer readable code comprising one or more automated surveyors for surveying any of: posted prices, bid prices, posted quotes, quoted prices, and auctions;
  - computer readable code comprising one or more anonymous buyer profiles, said anonymous buyer profile representing a sophisticated buyer and included within at least one of said one or more automated surveyors, and

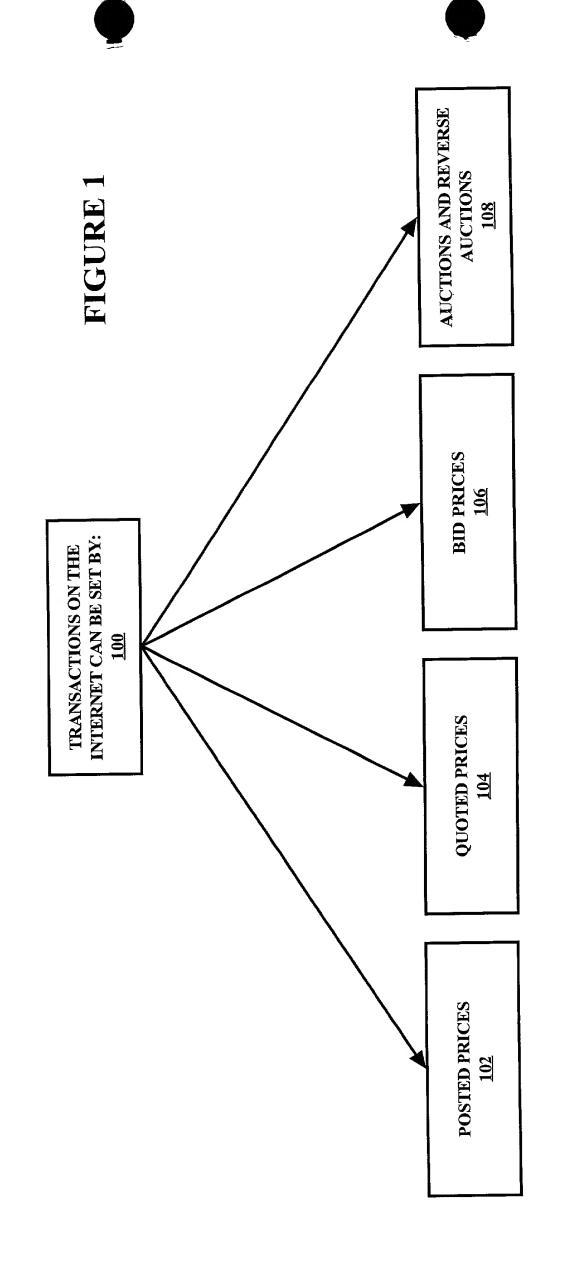
wherein use of said anonymous buyer profile increases the probability of discovering the best prices in an electronic commerce environment which includes electronic price discrimination.

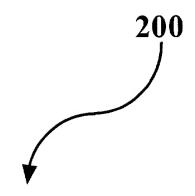
- 28. An article of manufacture comprising a computer user medium having computer readable program code embodied therein which enhances buyers performance in electronic commerce, according to claim 27, wherein code for said automated surveyors using said one or more anonymous buyer profiles further comprises computer code for:
- concealing a buyers true identity;
- picking one of many available fictitious names;
- requesting price quotes on behalf of a buyer without revealing the buyer's true identity;
- storing all received quotes, and
- maintaining statistics about said stored received quotes for reference of future buyers.

## ABSTRACT OF THE DISCLOSURE

"A System for Enhancing Buyers Performance in Electronic Commerce"

A system and method enhance a buyer's performance by gathering information, presenting to sellers sophisticated buyers who do not pay more than the minimum and indicating to sellers when they are competitive, influencing them to lower prices. The system operates through a web site and creates a major web portal where a consumer obtains advice about prices of just about anything and initiates transactions using various services provided by the system. Fictitious user names are generated and used by the system to work with different sellers to generate and store specific quotes. This information is later used to purchase goods on behalf of buyers who do not want to reveal their identities. I addition, the system can also uncover hidden fee structures associated with sellers and businesses.





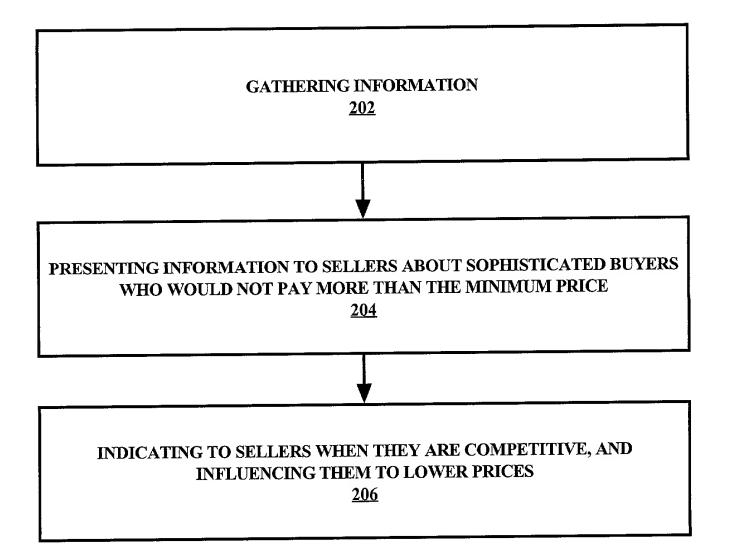
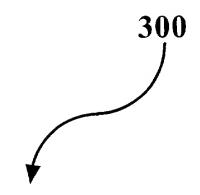


FIGURE 2



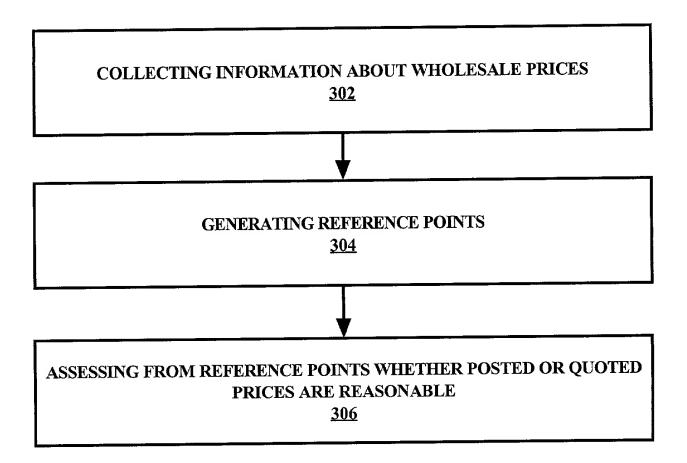


FIGURE 3

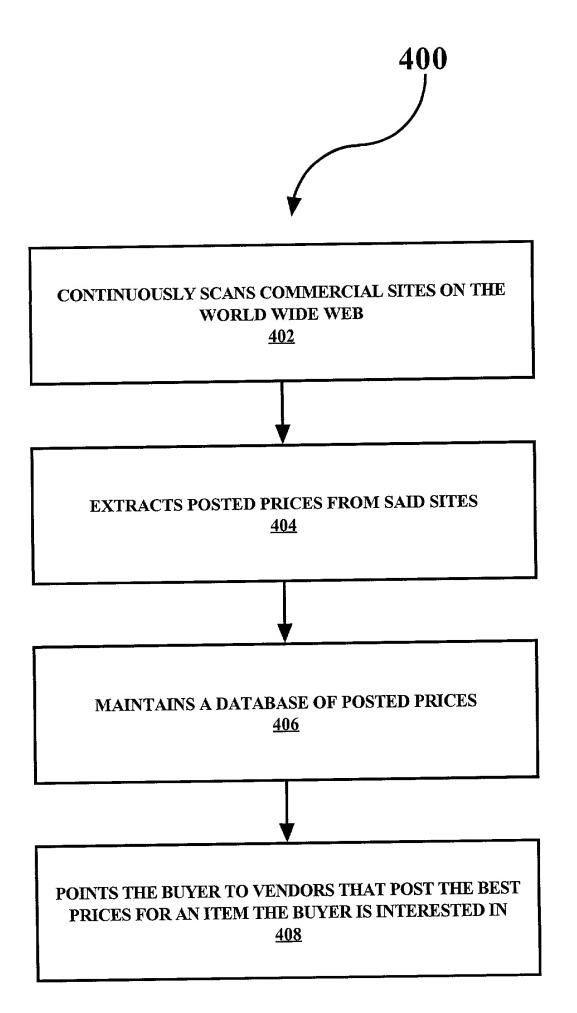


FIGURE 4

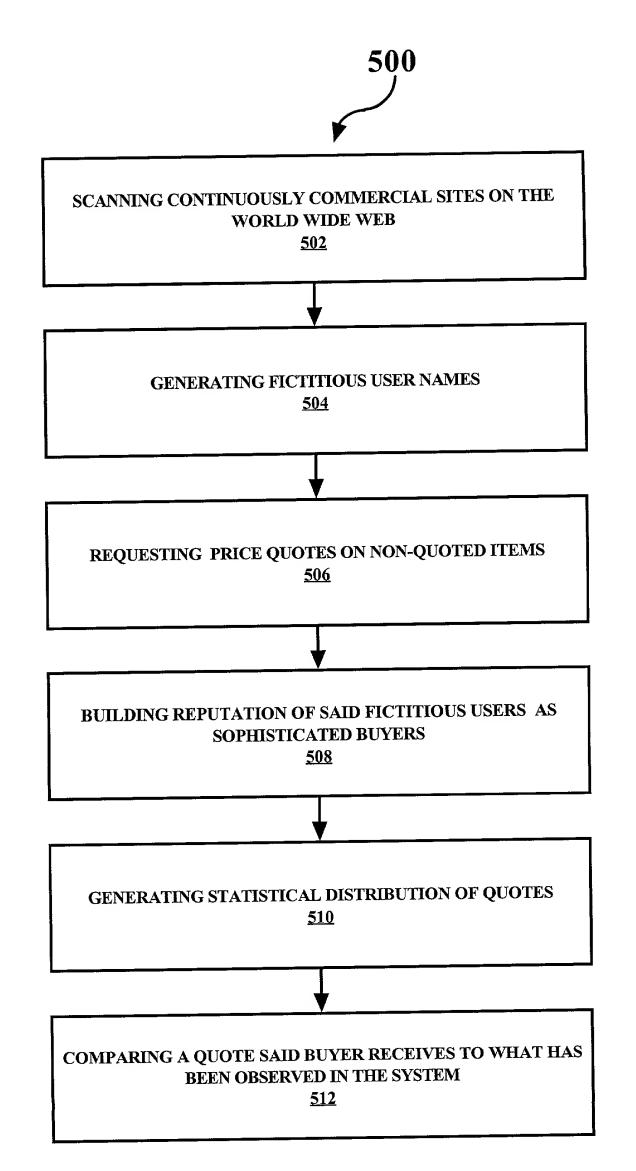


FIGURE 5

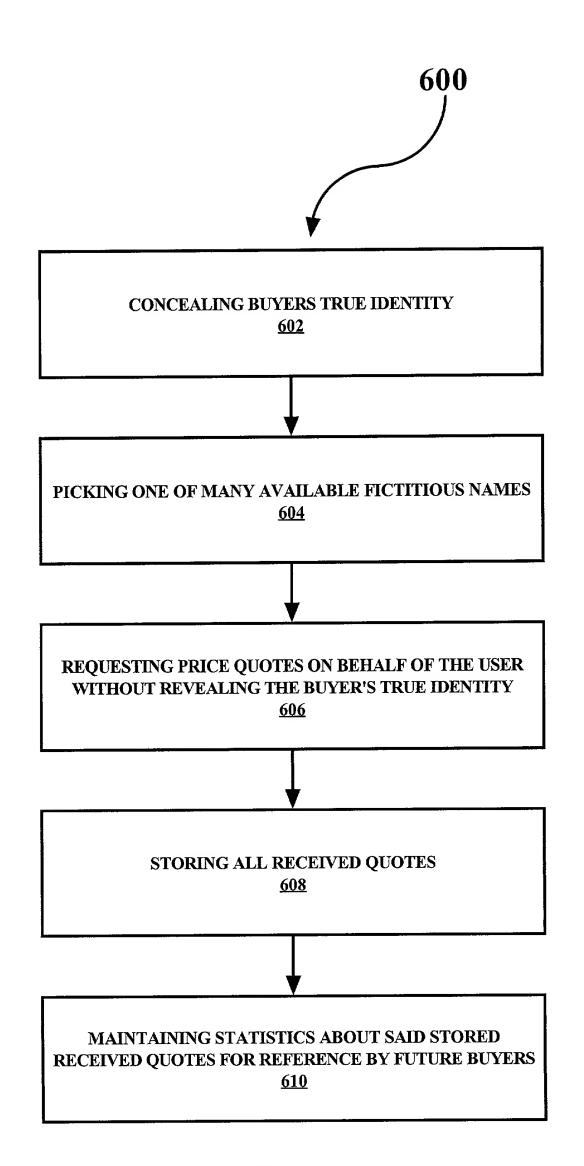


FIGURE 6

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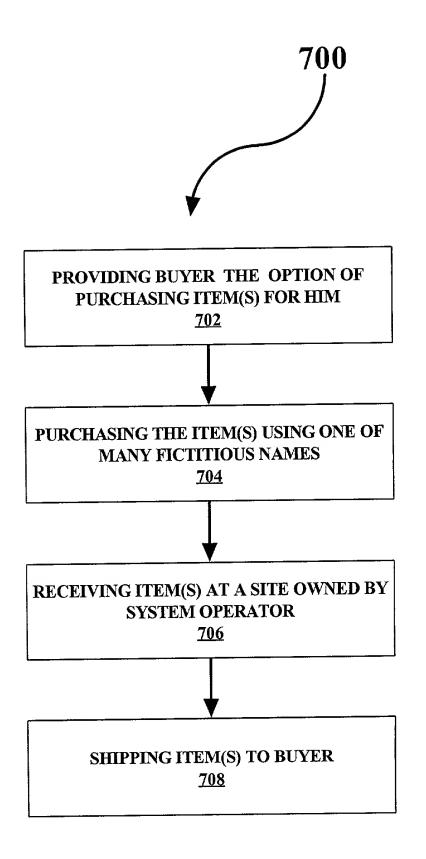


FIGURE 7

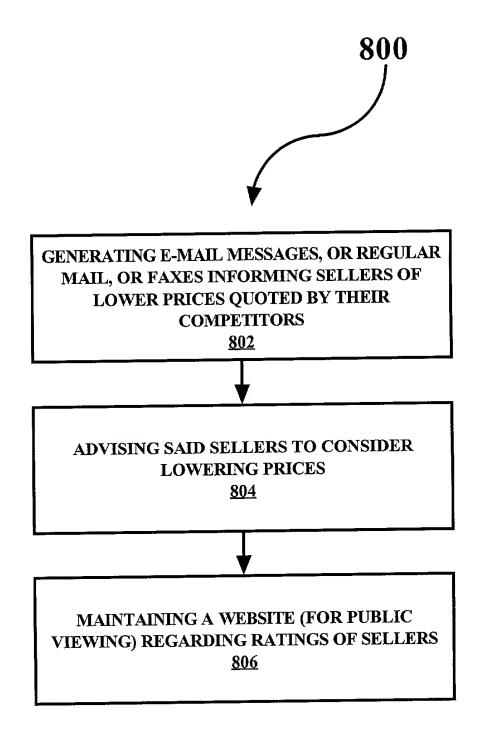


FIGURE 8

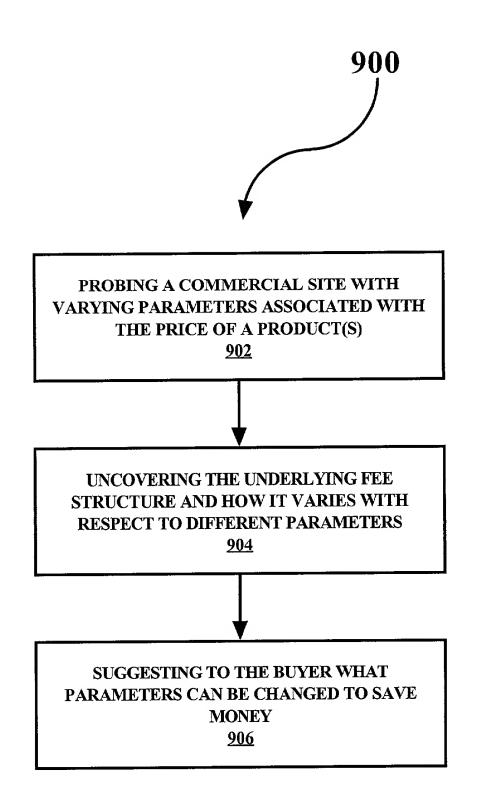
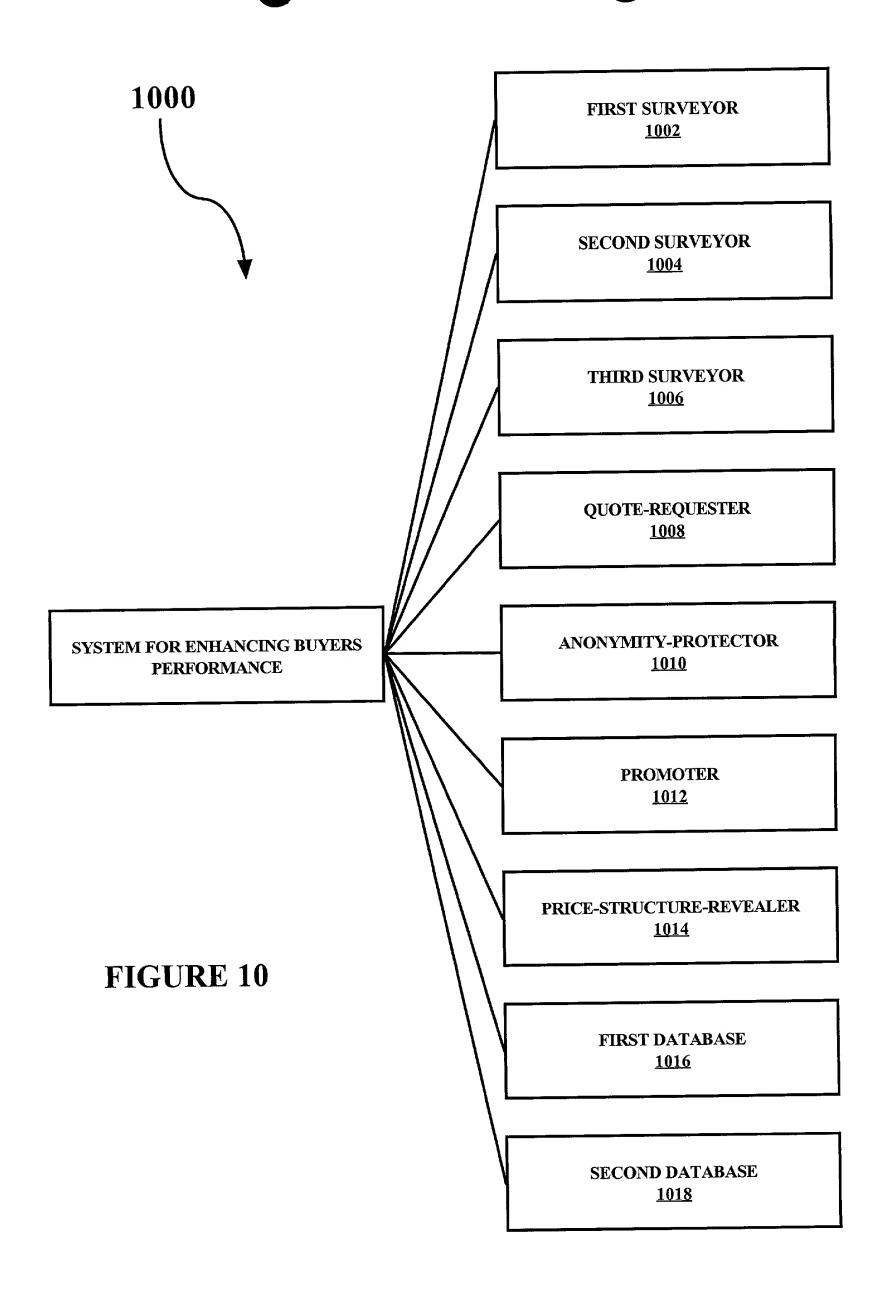


FIGURE 9



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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE DECLARATION FOR PATENT APPLICATION

#### INVENTOR:

Nimrod Megiddo

#### TITLE:

A System for Enhancing Buyers Performance in Electronic Commerce

DOCKET NO.: AM9-99-0239

## TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS:

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled, <u>A System for Enhancing</u>

<u>Buyers Performance in Electronic Commerce</u>, the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and having also identified below any foreign application for patents or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Applications				
			Priority Claimed:	Y/N
Number	Country	Day/Month/Year Filed		

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the National or PCT international filing date of this application.

Application No.	Filing Date	Status-patented, pending, abandoned
Application No.	Filing Date	Status-patented, pending, abandoned

**POWER OF ATTORNEY**: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Date: 8/3/03 Signature: Mimul Mey